

**Flood Control Project Maintenance
Levee Inspections**

Fall 2016 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2094	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 2094 Wathal	A	3.23						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments					0.01			
<i>Supplemental</i>								
DWR UCIP Field Study					0.04			
<i>LMA Totals:</i>	0.00	0.00	0.00	0.00%	0.05	0.00	0.00	0.00

Unit No. 01 San Joaquin River RB	Overall Unit Rating	Total Unit Miles						
RD2094	A	2.78						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments					0.01			
<i>Supplemental</i>								
DWR UCIP Field Study					0.04			
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%	0.05	0.00	0.00	0.00

Unit No. 02 San Joaquin River	Overall Unit Rating	Total Unit Miles						
RD2094	A	0.45						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
No Items								
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%				

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2016 Levee Inspection Results

Reclamation District No. 2094 Wathal

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Reclamation District No. 2094 Wathal

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	2.78
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/7/2016 - 4/7/2016		11/2/2016 - 11/2/2016	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By			Brian Mizuno RD 2094	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	10
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD2094_01_s_2013_10				
Comment Code					
Inspector Comment					
LMA has a flood response plan in the office. It is recommended for LMA and interested local volunteers to take a flood fight training class in order to refresh on skills and methods.					

No Photos

LM Start		Rating **	A	Issue No.	11
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_RD2094_01_s_2013_11				
Comment Code					
Inspector Comment					
Supplies available on-site.					

No Photos

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_RD2094_01_s_2013_12				
Comment Code					
Inspector Comment					
O&M Manual available at LMA's office.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 2094 Wathal

Tire marks shown onto the ramp from levee. Raised area extends to the trees in the background in the center of the photo.

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start	0.65	Rating **	M	Issue No.	15
LM End	0.65	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.767514 °	37.767514 °
				-121.294926 °	-121.294926 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21464 DS_ID:23086 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - walkway in poor condition and needs repair.- electric conduit on waterside. FIELD_STRUCT_DESC: 14-inch concrete encased steel pipe and GI conduit through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, slide gate, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe, installed by USCE, 1962 (O&M Unit No. 3, 1968) FS Date: 9/10/2013					

LM Start	0.65	Rating **	M	Issue No.	15 (cont)
LM End	0.65	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_FA_2016_21464_36405.jpg



WS view: gate valve in CMP riser (bottom) and pipe & pump (top) on piling structure in the channel.

Photo 2 of 2 : UCIP_FA_2016_21464_36404.jpg



WS view: pump on piling structure in the channel. Pipe (right- bottom) and conduit (bottom- left).

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start	1.25	Rating **	M	Issue No.	13
LM End	1.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.760581 °	37.760581 °
				-121.297373 °	-121.297373 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21544					
DS_ID:23087					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - working as drainage system during field visit. Pump was not running.- electric conduit on WS- open pipe end in CMP riser. CMP needs cleaning.					
FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, gate valve, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968)					
FS Date: 9/10/2013					

LM Start	1.25	Rating **	M	Issue No.	13 (cont)
LM End	1.25	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_FA_2016_21544_36524.jpg



WS view: overview of pump (top) and CMP riser (bottom)

Photo 2 of 2 : UCIP_FA_2016_21544_36523.jpg



WS view: pipe and pump on piling structure in the channel. Walkway in poor condition.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start	2.25	Rating **	M	Issue No.	16
LM End	2.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752230 °	37.752230 °
				-121.296408 °	-121.296408 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41726					
DS_ID:23088					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - dense vegetation on WS.- working during field survey.- slide gate not found on WS.					
FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 6.0 feet below the crown, slant pump mounted on a frame structure on the stream bank, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968)					
FS Date: 9/10/2013					

Photo 1 of 2 : UCIP_FA_2016_41726_36502.jpg



WS view: slant pump (top) on stream bank and CMP riser on levee shoulder.

LM Start	2.25	Rating **	M	Issue No.	16 (cont)
LM End	2.25	Issue Type +	En	Location *	WS

Photo 2 of 2 : UCIP_FA_2016_41726_36501.jpg



WS view: slant pump on stream bank and dense vegetation on stream bank.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start	2.45	Rating **	M	Issue No.	14
LM End	2.45	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752308 °	37.752308 °
				-121.293191 °	-121.293191 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21545 DS_ID:23089 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - no pipes found on either side of the levee.- concrete distribution box on LS. Soil erosion around distrinution box. FIELD_STRUCT_DESC: Rectangular concrete distribution box on the landward toe FS Date: 9/10/2013					

Photo 1 of 2 : UCIP_FA_2016_21545_36529.jpg



WS view: no pipe found on waterside.

LM Start	2.45	Rating **	M	Issue No.	14 (cont)
LM End	2.45	Issue Type +	En	Location *	WS

Photo 2 of 2 : UCIP_FA_2016_21545_36528.jpg



Enter photo 2 description or comment here.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2016 Levee Inspection Results

Reclamation District No. 2094 Wathal

Waterway			Bank	Unit Miles
Unit No. 02 San Joaquin River				0.45
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/7/2016 - 4/7/2016		11/2/2016 - 11/2/2016	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By	Brian Mizuno RD 2094		Brian Mizuno RD 2094	

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Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.45	11/02/2016 11/02/2016	Maksim Khashchuk

LM Start	0.02	Rating **	A	Issue No.	1
LM End	0.43	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.759323 °	37.760606 °
				-121.299904 °	-121.306989 °
DWR ID	DWR_RD2094_02_f_2016_1				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
LMA has good vegetation control program.					

Photo 1 of 1 : FA_2016_RD2094_321_1_20161104_00001.jpg



View of the vegetation on the waterside levee slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement